

SECTION 01 45 29
TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.1 SCOPE

A. Work Included:

1. Owner will employ and pay for the services of an Independent Testing Laboratory to perform specified testing and services.
2. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - a. Specific quality-control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - b. Specified tests, inspections, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with the Contract Document requirements.
 - c. Requirements for Contractor to provide quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
 - d. In addition to requirements listed in individual sections, testing laboratory shall provide special inspection for structural elements as required by Section 1704 of the International Building Code 2006 Edition.
3. Contractor shall cooperate with the Laboratory to facilitate the execution of its required services.
4. Contractor will pay for additional samples and tests required for Contractor's convenience or when initial tests indicate Work does not comply with Contract Documents.
5. Certification of products: Respective sections of Specifications.
6. Where terms "Inspector" and "Testing Laboratory" are used, they mean and refer respectively to an officially designated and accredited Inspector of the Testing Laboratory and the Testing Laboratory employed by the Owner.

B. Related Work:

1. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to Work of this Section.
2. Inspections and testing required by laws, ordinances, rules, regulations, orders or approvals of public authorities.
3. Divisions 03 through 05, Sections for specific test and inspection requirements.

1.2 QUALIFICATION OF LABORATORY

- A. Meet "Recommended Requirements for Independent Laboratory Qualifications", published by American Council of Independent Laboratories.
- B. Meet Basic requirements of ASTM E329, "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction" and ASTM E548.
- C. Authorized to operate in the State in which the project is located.
- D. Testing equipment shall be calibrated at reasonable intervals by devices of accuracy traceable to either:
 1. National Bureau of Standards.
 2. Accepted values of natural physical constants.

1.3 LABORATORY DUTIES AND RESPONSIBILITIES

- A. Cooperate with Architect and Contractor; provide qualified personnel after due notice.
- B. Perform specified inspections, sampling and testing of materials and methods of construction.
 1. Comply with Specifications.
 2. Ascertain compliance or non-compliance of materials with requirements of Contract Documents and indicate status of compliance on test reports.
 3. Furnish Architect with written evaluation of proposed concrete design mixes, and other materials, submitted by the Contractor for evaluation.

- C. Notify Architect and Appropriate Engineer if agreement between Owner and Testing Laboratory excludes any specified testing requirement contained herein and identify those exclusions.
- D. Notify Architect and Contractor immediately of observed work or materials which fail to meet the requirements of the Contract Documents.
- E. Submittals: Promptly submit written report of each test and inspection to Owner with copies to the Architect, Structural Engineer and Contractor and others specifically designated by the Architect. Each report shall include:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Testing Laboratory name, address and telephone number.
 - 4. Name and signature of Laboratory inspector.
 - 5. Date and time of sampling or inspection.
 - 6. Record of temperature and weather conditions.
 - 7. Date of tests.
 - 8. Identification of products and Specification section.
 - 9. Location of sample or test in the Project.
 - 10. Type of inspection or test.
 - 11. Results of tests and compliance or non-compliance with Contract Documents.
 - 12. Interpretation of test reports, when requested by Architect.
- F. Perform additional tests as required by Architect or Owner.

1.4 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY

- A. Laboratory is not authorized to:
 - 1. Release, revoke, alter or enlarge on requirements of Contract Documents.
 - 2. Approve or accept any portion of the Work.
 - 3. Perform any duties of the Contractor.

- B. Work will be checked as it progresses, but failure to detect any defective work or materials shall not, in any way, prevent later rejection when such defect is discovered.

1.5 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with Laboratory personnel, provide access to Work and to Manufacturer's operations.
- B. Secure and deliver to the Laboratory adequate quantities of representative samples of materials proposed to be used and which require testing.
- C. Furnish the Laboratory with proposed concrete design mixes, and other material mixes which require evaluation by the Testing Laboratory, a minimum of 14 days prior to use on the project.
- D. Furnish copies of Project's test reports as required.
- E. Furnish incidental labor and facilities:
 - 1. To provide access to Work to be tested.
 - 2. To obtain and handle samples at the project site or at the source of the product to be tested.
 - 3. To facilitate inspections and tests.
 - 4. For safe storage and curing of test samples.
- F. Notify Laboratory and Architect 24 hours in advance of operations to allow for Laboratory assignment of personnel and scheduling of tests.
 - 1. When tests or inspections cannot be performed after such notice, reimburse Laboratory for personnel and travel expenses incurred due to Contractor's negligence.
 - 2. Make arrangements with Laboratory and pay for additional samples and tests required for Contractor's convenience.
 - 3. Make arrangements with Laboratory and pay for additional samples and tests required when initial tests indicate non-compliance with Contract Documents, including load tests.
 - 4. Pay the Testing Laboratory for such tests or inspections as are performed exclusively for the Contractor's convenience, or beyond scope requirements of general conditions.

PART 2 - PRODUCTS

Refer to each Specification Section.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces, substrates and conditions for compliance with requirements of other sections in which that related work is specified, and determine if surfaces, substrates and conditions affecting performance of the work of this section are satisfactory. Do not proceed with work of this Section until satisfactory conditions have been corrected in a manner acceptable to the Installer. Starting installation constitutes acceptance of surfaces, substrates and conditions.

END OF SECTION

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